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5.7 Bringing It Home; 6. Searching: The Art of Finding Needles in Haystacks; 6.1 The Sudoku Stork; 6.2 A Stork with GPS; 6.3 How to Search; 6.4 Searching for Eighteen-Clue Sudoku; 6.5 Measuring Difficulty; 6.6 Ease and Interest Are Inversely Correlated; 6.7 Sudoku with an Extra Something; 7. Graphs: Dots, Lines, and Sudoku; 7.1 A Physics Lesson; 7.2 Two Mathematical Examples; 7.3 Sudoku as a Problem in Graph Coloring; 7.4 The Four-Color Theorem; 7.5 Many Roads to Rome; 7.6 Book Embeddings
8. Polynomials: We Finally Found a Use for Algebra
8.1 Sums and Products; 8.2 The Perils of Generalization; 8.3 Complex Polynomials; 8.4 The Rise of Experimental Mathematics; 9. Extremes: Sudoku Pushed to Its Limits; 9.1 The Joys of Going to Extremes; 9.2 Maximal Numbers of Clues; 9.3 Three Amusing Extremes; 9.4 The Rock Star Problem; 9.5 Is There "Evidence" in Mathematics?; 9.6 Sudoku Is Math in the Small; 10. Epilogue: You Can Never Have Too Many Puzzles; 10.1 Extra Regions; 10.2 Adding Value; 10.3 Comparison Sudoku; 10.4 ...And Beyond; Solutions to Puzzles; Bibliography; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W; Y; Z

Sommario/riassunto

Packed with more than a hundred color illustrations and a wide variety of puzzles and brainteasers, *Taking Sudoku Seriously* uses this popular craze as the starting point for a fun-filled introduction to higher mathematics. How many Sudoku solution squares are there? What shapes other than three-by-three blocks can serve as acceptable Sudoku regions? What is the fewest number of starting clues a sound Sudoku puzzle can have? Does solving Sudoku require mathematics? Jason Rosenhouse and Laura Taalman show that answering these questions opens the door to a wealth of interesting mathematics. Indeed
